



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,670	11/27/2001	Song Han	19111.0053	8023
68009	7590	01/23/2008		
BINGHAM MCCUTCHEN, LLP			EXAMINER	
2020 K STREET, NW			PATEL, DHAIRYA A	
BOX 1P			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20006			2151	
			MAIL DATE	DELIVERY MODE
			01/23/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/993,670

Applicant(s)

HAN ET AL.

Examiner

Dhairya A. Patel

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply.

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,10,11,13-17,20,21,23-27 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,10,11,13-17,20,21,23-27 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to RCE filed on 11/5/2007.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/5/2007 has been entered.

2. This amendment has been fully considered and entered.
3. Applicant's arguments have been fully considered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,3-7,10,11,13-17,20,21,23-27,30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed et al. U.S. Patent # 6,263,209 (hereinafter Reed) in view of Souissi et al. U.S. Patent # 6,091,959 (hereinafter Souissi).

As per claim 1, Reed teaches a method for providing location-based event service comprising the steps of:

a) obtaining information, either from a cache operable to store information indicating locations of a plurality of mobile users (Fig. 1 element 122) or querying at least one mobile positioning server (column 5 lines 17-24, lines 28-50), indicating a current location of a plurality of mobile users, including a selected mobile user; (column 5 lines 17-28, lines 54-63)

The reference teaches getting the information about plurality of mobile users who have portable subscriber units with the mobile users about their current location and fixed portion including a user selected (column 5 lines 54-63) from a mass medium (cache operable) which stores information regarding locations and recording times for the portable subscriber units and the users (column 5 lines 17-24). The reference also teaches that mass medium can be located on the server which can be used to obtain information regarding locations and the times of the mobile users (querying one mobile server). The reference also teaches each portable subscriber unit is carried by the user and in Fig. 1 element 122, shows multiple portable subscriber unit which means that there are plurality of users since portable subscribe unit are carried by the users so if there are multiple portable subscribers units and there has to be equal amount of users, and locations of plurality of users and portable subscriber units are stored in the mass medium (column 5 lines 53-63).

- determining if at least one condition requiring of the plurality of mobile users is satisfied based on the indicated current location of the selected mobile user (column 5 lines 17-28, lines 54-67);

The reference teaches comparing the current location just taken with the attribute stored in the database (determining at least one condition) to determine whether an alert is necessary. The attribute is collected from the plurality of users and their portable subscriber units (column 5 lines 17-28). Then the comparison is made from the current location of the user selected and the attribute collected from the plurality of users, which is stored in the database. Therefore when the comparing the current location with the attribute stored in the database is satisfied is same as determining if at least one condition (comparing) requiring the plurality of mobile users.

c) performing at least one event, when the at least one condition is satisfied (column 5 lines 54-67) (column 6 lines 1-4, lines 12-20); and

The reference teaches if the condition is satisfied an alert (one event) is generated. The reference further teaches when the portable subscriber unit determines that the current time is within a predetermined time (when at least one condition is satisfied), the portable subscriber unit then sends a alert to the user, preferably an audible or vibratory alert accompanied by a message (performing at least one event).

Reed teaches calculating a time interval to wait before repeating steps a)-c) (column 6 lines 5-20), wherein calculation of the time interval to wait is based on the selected mobile user (column 6 lines 8-20), wherein the selection mobile user is based on the selected mobile user being the least likely mobile user from among the plurality of mobile users to satisfy the condition (column 7 lines 1-45).

The reference teaches calculating the time interval to wait i.e. when the portable subscriber unit determines that the current time is within predetermined time e.g. 10

minutes of closing time (calculating time interval to wait), the portable subscriber unit checks the location of the user if the user is in the building and if so sending an alert to the user by a message that the lobby will be closing in ten minutes (before repeating steps a-c). The reference also teaches plurality of mobile user having portable subscribers units with plurality of times and in plurality of locations and mobile user is selected which updates the user schedule database of the requesting portable subscriber unit with a reminder leave airport at 2:50pm so that the user can arrive airport at 4p.m (selected mobile user being least likely mobile user from among plurality of mobile user to satisfy the condition). In these two examples, the mobile user is least likely to satisfy condition that is why an alert is sent.

Souissi also teaches calculating a time interval to wait before repeating steps a)-c), wherein calculation of the time interval to wait is based on the selected mobile user, wherein the selection mobile user is based on the selected mobile user being the least likely mobile user from among the plurality of mobile users to satisfy the condition (column 7 lines 3-15)(column 7 lines 33-67) (column 8 lines 1-21).

The reference teaches two examples in which plurality of users each with portable subscribers units, the controllers selects or begins with the user with the portable subscriber unit based on the location of the user by calculating the distance between the specific location of the event and the location at which the portable subscriber unit is positioned from plurality of portable subscribers units (selecting mobile user from plurality of mobile users)(column 7 lines 33-53). The reference also teaches determining the predetermined time to wait which is one minute when a sufficient

response of the message has not occurred from the user (time interval to wait based on the selected user) (column 7 lines 53-59).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Reed et al's invention with to determine the time interval to wait comprises selecting as the selected mobile user from plurality of mobile users. The motivation for doing so would have been so that to find out from the current location of the users, which individual user of the plurality of mobile users would be the first one to respond quickly or who would be the last user to respond and therefore reducing over-the-head traffic (column 7 lines 3-15, lines 48-53).

As per claim 3, Reed and Souissi teaches the method of claim 1 but Souissi further teaches, wherein the step of: calculating the a time interval to wait based on the selected mobile user comprises the steps of:

- estimating a time at which the selected mobile user is likely to satisfy a condition based on at least one of: a distance from a current location of the selected mobile user to a region relevant to the condition, a velocity of the selected mobile user; and (column 7 lines 33-67) (column 8 lines 1-21)

The reference teaches sending message to the users who are likely to satisfy a condition based on the distance of the location of the users based on the current location at which the user is positioned to the specific location of the event (region relevant to the condition).

-determining the time interval to wait based on the estimated time at which the selected mobile user contributes least to traffic overhead. (column 7 lines 3-15, lines 33-67) (column 8 lines 1-21).

The reference teaches determining the time interval to wait based on the calculated distance and time at which a selected user is likely to respond to help message transmission and picking the user who respond quickly based on location and skipping those who are far away which would reduce over-the-air traffic (column 7 lines 3-15, lines 33-67).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Reed et al's invention to estimate at time a selected mobile user likely to satisfy a condition and determine a time interval to wait based on estimated time which the user contributes least to traffic overhead. The motivation for doing so would have been to determine the wait and to find out from the current location of the user how much estimated time it is going to take for the selected user to respond and reducing over-the-air traffic. (column 7 lines 3-15, lines 48-53).

As per claim 4, Reed and Souissi teaches the method of claim 3, but Reed further teaches wherein the obtaining step comprises the steps of:

-searching the cache operable to store information indicating locations of a plurality of mobile users for information indicating a location of the selected mobile user; (column 5 lines 17-24)(column 5 lines 54-67) (column 6 lines 1-4) (column 6 lines 21-34)

The reference teaches getting the information about plurality of mobile users who have portable subscriber units with the mobile phone about their current location and fixed portion including a user selected (column 5 lines 54-63) from a mass medium (cache operable) which stores information regarding locations and recording times for the portable subscriber units and the users (column 5 lines 17-24). The reference also teaches each portable subscriber unit is carried by the user and in Fig. 1 element 122, shows multiple portable subscriber unit which means that there are plurality of users since portable subscribe unit are carried by the users so if there are multiple portable subscribers units and there has to be equal amount of users, and locations of plurality of users and portable subscriber units are stored in the mass medium (column 5 lines 53-63).

-using the information indicating the location of the selected mobile user as the information indicating the current location of the selected mobile user, if the information indicating the location of the selected mobile user is found in the cache; (column 5 lines 54-67) (column 6 lines 1-4, lines 21-34, lines 45-52) and

The reference teaches comparing the current location information of the user with the attribute (stored in cache) to determine if the alert is necessary.

-querying at least one mobile positioning server to obtain the information indicating the current location of the selected mobile user, if the information indicating the location of the selected mobile user is not found in the cache.
(column 6 lines 1-4, lines 21-52)

As per claim 5, Reed and Souissi teaches the method of claim 4, but Reed

further teaches wherein the at least one event comprises transmitting a message (column 5 lines 54-67) (column 6 lines 1-20).

The reference teaches the alert message is transmitted to the mobile user.

As per claim 6, Reed and Souissi teaches the method of claim 5, but Reed further teaches wherein the message is transmitted to a mobile user (Column 5 lines 54-67) (Column 6 lines 1-20). The reference teaches the alert message is transmitted to the mobile user.

As per claim 7, Reed and Souissi teaches the method of claim 5, but Reed further teaches wherein the message is transmitted to a non-mobile user (Column 6 lines 31-62).

The reference teaches updates the second customer (non-mobile user) about the delay of the sales person (Mobile user) who was scheduled to arrive at a certain time.

As per claim 10, Reed and Souissi teaches the method of claim 4, but Souissi further teaches wherein the contribution to the traffic overhead on a mobile network relates to a location of the plurality of mobile users and to a time (column 7 lines 3-15, lines 33-67) (column 8 lines 1-21). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Reed et al's invention to have contribution to network overhead which relates to location of plurality of mobile users and to a time. The motivation for doing so would have been to find out from the current location of the users, which individual user of the plurality of mobile users would be the first one to respond quickly or who would be the last user to respond (column 7 lines 48-53).

As per claims 11, 13-17, 20, they teach same limitations as claims 1,3-7,10 respectively, therefore rejected under same basis.

As per claims 21,23-27,30, they teach same limitations as claims 1,3-7,10 respectively, therefore rejected under same basis.

Remarks

Applicant's arguments filed 3/14/2007 have been fully considered but they are not persuasive.

5. Applicant stated the following remark:

A). Reed does not disclose nor suggest "calculating a time interval to wait before repeating steps a)-c), wherein calculation of the time interval to wait is based on the selected mobile user, wherein the selection mobile user is based on the selected mobile user being the least likely mobile user from among the plurality of mobile users to satisfy the condition.

As per remark A, Examiner respectfully disagrees with the applicant because in column 6 lines 5-20 and column 7 lines 1-45, Reed teaches calculating the time interval to wait i.e. when the portable subscriber unit determines that the current time is within predetermined time e.g. 10 minutes of closing time (calculating time interval to wait), the portable subscriber unit checks the location of the user if the user is in the building and if so sending an alert to the user by a message that the lobby will be closing in ten minutes (before repeating steps a-c). The reference also teaches plurality of mobile user having portable subscribers units with plurality of times and in plurality of locations and mobile user is selected which updates the user schedule database of the

requesting portable subscriber unit with a reminder leave airport at 2:50pm so that the user can arrive airport at 4p.m (selected mobile user being least likely mobile user from among plurality of mobile user to satisfy the condition). Applicant states Reed does not teach calculation of time interval is required to perform a function. In column 7 lines 31-43, Reed teaches that user has planned to leave at 2:30 pm, but based on calculation of time interval before repeating steps it states the reminder to leave for airport is at 2:50pm. In these two examples, the mobile user is least likely to satisfy condition that is why an alert is sent. Therefore Reed does teach calculation of time interval.

Souissi also teaches the same claimed limitations. In column 7 lines 3-15, column 7 lines 33-67, column 8 lines 1-21, Souissi teaches two examples in which plurality of users each with portable subscribers units, the controllers selects or begins with the user with the portable subscriber unit based on the location of the user by calculating the distance between the specific location of the event and the location at which the portable subscriber unit is positioned from plurality of portable subscribers units (selecting mobile user from plurality of mobile users)(column 7 lines 33-53). The reference also teaches determining the predetermined time to wait which is one minute when a sufficient response of the message has not occurred from the user (time interval to wait based on the selected user) (column 7 lines 53-59). In column 8 lines 2-21, Souissi teaches plurality of subscribers units having less than the maximum distance preferably identify themselves by reporting the fixed portion. The broadcast message also specifies an action to be taken (satisfy condition) the one of the plurality of portable

subscriber units having a distance less than maximum distance to execute the action .

Therefore Souissi teaches the claimed limitations.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Reed et al's invention with to determine the time interval to wait comprises selecting as the selected mobile user from plurality of mobile users. The motivation for doing so would have been so that to find out from the current location of the users, which individual user of the plurality of mobile users would be the first one to respond quickly or who would be the last user to respond and therefore reducing over-the-head traffic (column 7 lines 3-15, lines 48-53).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A). "Method and Apparatus in a wireless communication system for creating a learning function" by Reed et al. U.S. Patent # 6,263,209.

B). "Method and Apparatus in a two-way wireless communication system for location-based message transmission" by Souissi et al. U.S. Patent # 6,091,959.

7. A shortened statutory period for response to this action is set to expire **3 (three) months and 0 (zero) days** from the mail date of this letter. Failure to respond within the period for response will result in **ABANDONMENT** of the applicant (see 35 U.S.C 133, M.P.E.P 710.02, 710.02(b)).

8.

Application/Control Number:
09/993,670
Art Unit: 2151


Page 13

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dhairya A. Patel whose telephone number is 571-272-5809. The examiner can normally be reached on 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DAP

 JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100